revious references.

File No. 55-09

1909-10

(Genl: Mis.)

Serial Nos. 1-19

Later references.

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 1—19

Part B. for March 1910.

SUBJECT.

Application of Mr John Slorach of the Geldenhuis Estate & Gold Mining Co, Johannesburg for leave to file a specification of an invention for 'Improvements in valve devices for Rock drills & similar reciprocating engines'

Sl. 1 Letter no: 435 d 23.7.09 from Rempry & Sons, Solicitors and Patent Agents, Johannesburg forwards an appln of Mr John Slorach, of the Glendenhuis Estate and Gold mining Co limited, Cleveland near Johannesburg, Transvaal, Engineer, for leave to file a specification of an invention for "Improvements in Valve devices for Rock-drills and Similar reciprocating Engines"

Sl. 2. do. No: G. 616 & 5.8.09 to the officer in charge of the State Mazoe Treasury forwards Rs 10 received with Sl. 1. & requests acknowledgment

Sl 3. do. No: G. 617 & 5.8.09 to the Supdt of stamps in Mysore. forwards with Re 1/- the power of attorney recd with Sl 1. for being stamped and returned

Sl 4. — No G. 618 & 5.8.09 to the State Geologist in Mysore forwards for report the specification recd with Sl. 1.

Sl 5. U. R. S. 58 No G. 604 & 6.8.09 from the officer in charge of the State Mazoe Treasury — Acknowledges the receipt of Rs 10/- sent with Sl above.

No. 314. & 7.3.09. From the Supdt of Stamps. Returns duly stamped the power of attorney sent in

6

1 P.T.O

with Sl. 6

8 No 650 d 30.8.09. From the State Geologist.
Returns the specification sent with sl. 4 above with remarks that the device specified appears to be sound and likely to prove serviceable and novel and states that the leave applied for may be granted.

" 9 No. G 1627 d 13.9.09. To Mr. John Slorach of the Geldenhuis estate - Johannesburg - Grants him leave to file the specification in question.

10. No G 1628 d 13.9.09. To Messrs. Remfry & Son, Calcutta
Forwards Sl. 9 for communication to the party concerned & requests ack.t.

11. d. 1.3.10. From the above.
Files the specification referred to in Sl 1. and forwards 4 copies of the same with Rs 30/- towards the fee req.d for filing the specification -

12. No: G 4855. d. 17.3.10
Notifies the filing of the Invention in question - to the Compiler, Mysore Gazette.

13. No. G. 4856. d. 17.3.10 To Messrs. Remfry & Sons, Calcutta
Forwards a copy of the above notification and returns the order duly certified.

14 No. G. 4857 d. 17.3.10. To the Officer in charge of the State Huzur Treasury. — Remits Rs 30/- being the fee for filing the specification referred to in Sl. 1 above.

15. No. G. 4858 - d. 17.3.10. 1) To the State Geologist
4859 - do - 2) To the Chief Engineer
4860 - do - 3) To the Supdt, Govt Museum.
Forwards to each a copy of the specification for being filed in their office

16. No 1938. d. 19.3.10. From the State Geologist.
Ack.ds the receipt of a copy of the specification sent with Sl. 15.

" 17. No 378 d. 19.3.10. From the Officer in ch. of the State Huzur Treasury. — Acknds the receipt of Rs 30/- sent with Sl. (14)

18 No 2545. d. 22.3.10. To the Chief Engineer
Acknowledges the receipt of the copy of the specification sent with Sl 15 above.

19. No 176 d. 22.3.10. From the Supdt of Govt Museum.
Same as in Sl 18.

G.R.S.11]

Invention Rep
no 68 of 1909-10

1909.-10

GENERAL AND REVENUE SECRETARIAT

(Genl- this)

NOTES.

Gen File No. 55 of 09-10

FILE HEADING.

Invention for "Improvements in valve devices for Rock-drills and similar reciprocating engines by John Storach of Johannesburg.

From

Messrs Remfry and Son, Solicitors and Patent Agents, Calcutta

No. Letter Dated 23-7-09 Received 26.7.09.

Diary No. 435	Enclos. one Spare Copies	Serial No. 1

BRIEF ABSTRACT OF LETTER.

Forwards an application of Mr. John Storach, of the Geldenhuis Estate and Gold Mining Co. Ltd, Cleveland, near Johannesburg, Transvaal, Engineer, for leave to file a specification of an invention for "Improvements in valve devices for Rock-drills and similar reciprocating engines".

NOTES AND ORDERS.

With the above, a power of attorney and a sum of Rs 11 towards the application fee and stamp duty, have been received. The power of Attorney is to be got stamped; the fee remitted and to the State Surgeon Secy

NOTES—First sheet.

GPB—30,000—3-4-07

Serial No.	
	and the specification sent to the State Geologist for opinion Three offs are accordingly submitted for approval (Sd) Illegible 29.7.09 Issued Sd 30.7.09
2	To the Offr in charge the State Registry No Sd 616 dy 5-8-09. Forwards Rs 10 recd vide Sl 1 requesting acctn
3	To the Supdt of Stamps in Mysore No Sd 617 dy 5-8-09 Forwards vide Rs 1/- for being stamped recd, the power of attorney recd vide Sl 1
4	To the State Geologist in Mysore No Sd 618 dy 5-8-09. Forwards for report the specification recd vide Sl 1.
5	To the Officer in charge S. H. 2 No 6 dd 6-8-09 Acknowledges the receipt of Rs 10 sent vide Sl 2 above.
6	From the Supdt of Stamps No 34 dated 7-8-09 Returns duly stamped the power of attorney sent vide Sl 3 above.

NOTE—Contn. sheet.

Serial No.

3. Serial 5 is submitted for perusal
Dft. acknl. to the supt. of Stamps
& put up. [illegible] 8/6

(C.S. bus 9.8.09)

Issue draft.
9.8.09.

9 7 To the Supt. of Stamps
No C 9099 & 13.8.09.
Acknowledge the receipt of the
power of attorney sent with 8/6
8. from the State Geologist
No 650 d. 30.8.09
Returns the specification sent
with 8 & 6 above, with remarks
that the device specified above
is the usual and likely to prove
serviceable and novel and
says that the leave applied for
may be granted.
Submitted with a draft order
granting leave and a draft
forwarding letter.

(C.S. bus 4.9.09)

9 To Mr J Mc Storach of the Geldenhuis
Estate - Johannesberg
No C 1627 & 13.9.09. Grants him
to file the specification in question

NOTE—Contn. sheet.

General and Revenue Secretariat.

File No. 55 of 190 9-10

Serial No.	
10	To Messrs Remfry & Son Calcutta No 916283 13.9.09 Forwards Sl 9 for Communication to the party concerned Requests receipt
11	From the above firm - letter dated 1st March 10 Files the specification referred to in Sl 1 and forwards 4 Copies of the same together with Rs 30 towards the fee required for filing the specification. Usual drafts are put up. The ~~draft~~ certificate at the foot of the order requires signature and the date of the same - an initial Submitted (AP 10/3/10) VS 11-3-10 Seen 12/3/10
12.	No 4855 dt 17.3.10 Rs Notifies the filing of the invention in Gr. — to the Compiler Mysore Gazette
13	To Messrs Remfry & Son, Calcutta No 4856 dt 17.3.10 Forwards a Copy of the above notification and returns the order ~~Sgd~~ duly certified.
14.	To the Officers in charge of State Hazur Dy

NOTE—Contn. sheet.

GPB—50,000—13-5-08

Serial No.

Rc No G 4857 d 17-3-10
Remits Rs 30 being the fee for filing the specification referred to in 12.

15 Do 1) State Geologist.
2) The Chief Engineer
3) The Supdt Govt Museum

Rc No G 4858-60 d 17.3.10.
Forwards herewith a copy of the specification referred to in sl 12 for being filed in their Office

16. From the State Geologist Rc 1938 dt 19-3-10
Acknowledges the receipt of a copy of specification sent with sl 10

17. To the Officer in Ch. of State Surveys
Acknowledges the receipt of Rs 30 sent with sl (14)
Serials 16 & 17 are submitted for perusal
The invention Register requires initials in the last column on page 36.

(22.3.10) VS Seen - Register initialed
23/3/10

18 From the Chief Engineer Rc 2545 d 22.3.10
Acknowledges the receipt of the copy of specification sent with sl 15 above
DD

NOTE—Contn. sheet.

BPG—55,000—27-4-09

Serial No.

19. From the Supdt of Govt Museum
No 176 J 22.3.10
Same as Sl 18
Serials 18 & 19 are submitted for perusal
This file may now be ordered to be recorded.
(CP 26.3.10) VS
Yes
31/3/10

Received

BPG—55,000—27-4-09

To

MYSORE

~~THE SECRETARY TO THE GOVERNMENT OF INDIA,~~

General & Revenue Department,

~~DEPARTMENT OF REVENUE AND AGRICULTURE (PATENTS).~~

Bangalore, Mysore.

From

REMFRY & SON,

Solicitors and Patent Agents,

CALCUTTA.

Dated Calcutta, 23rd July 1909.

Sir,

We have the honour to forward herewith an Application of JOHN SLORACH, of The Geldenhuis Estate and Gold Mining Company Limited, Cleveland, near Johannesburg, Transvaal, Engineer, for leave to file a Specification under Part I of the Mysore Inventions & Designs Regulation, 1894, in respect of an Invention for "IMPROVEMENTS IN VALVE DEVICES FOR ROCK-DRILLS AND SIMILAR RECIPROCATING ENGINES", and solicit the favour of your submitting the same for the orders of His Highness the Dewan of Mysore.

The Power of Attorney under which we are acting is also sent herewith and we solicit the favour of your stamping same ₹s 1/-. A P.O.O. for ₹s 11/- is sent today.

There is no corresponding Application filed in India.

We have the honour to be,

Sir,

Your very obedient servants,

REMFRY & SON.

per

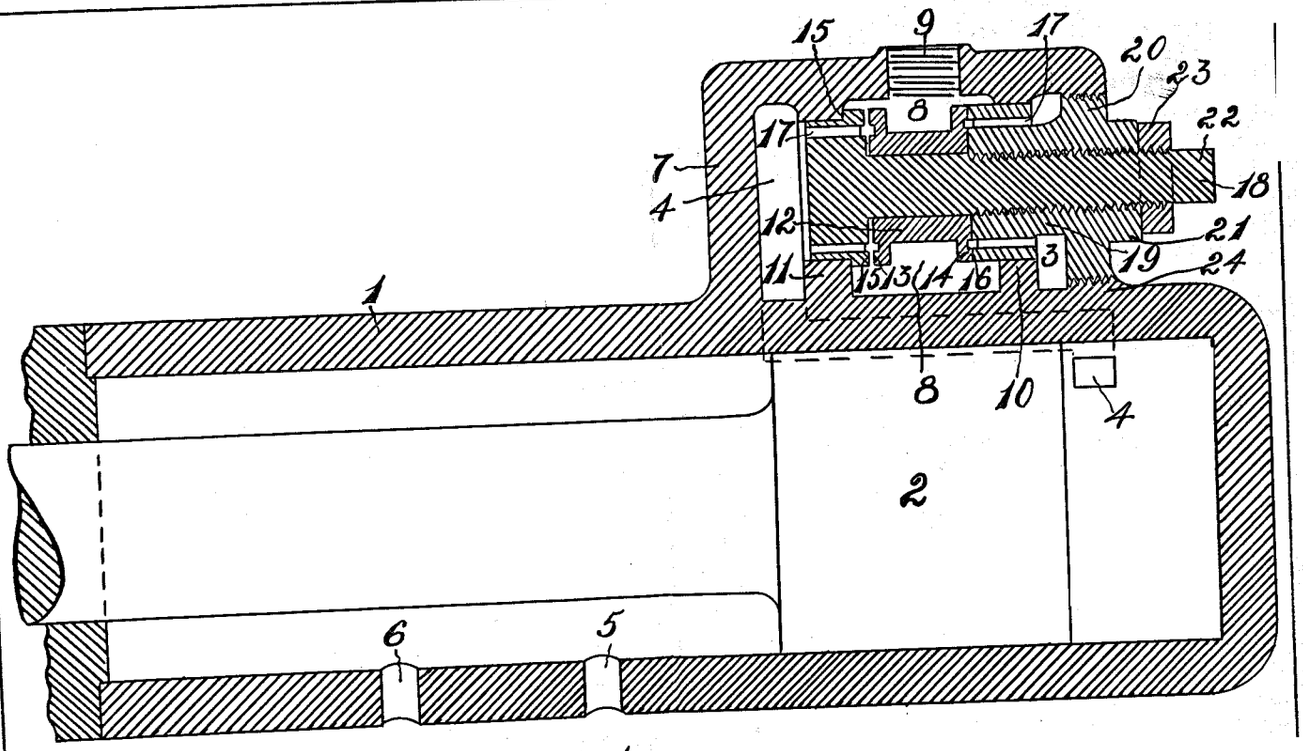

Fig. 1.

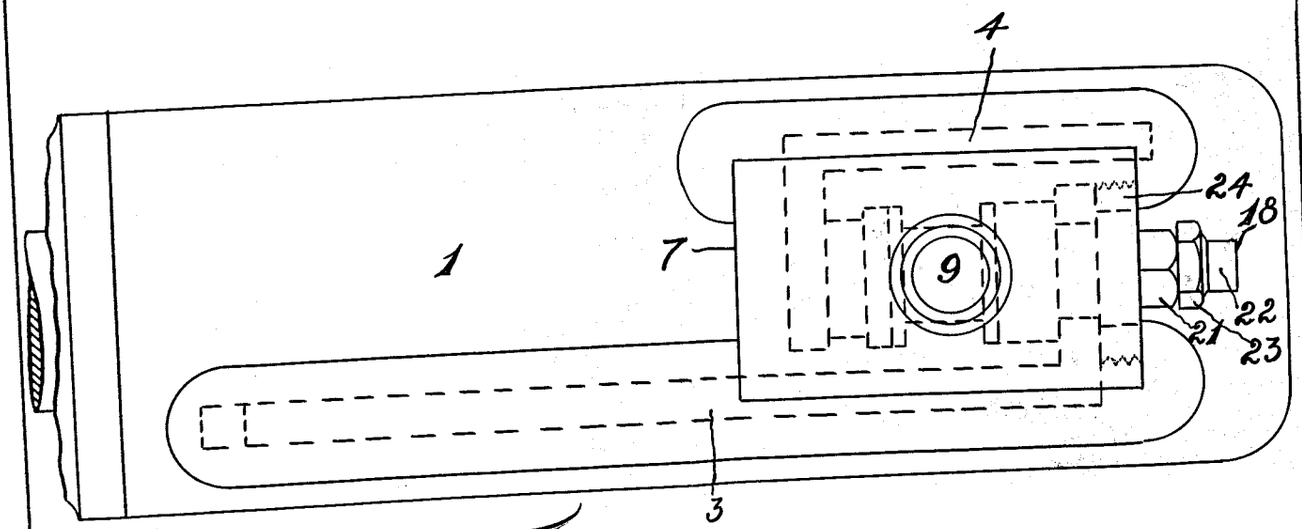

Fig. 2.

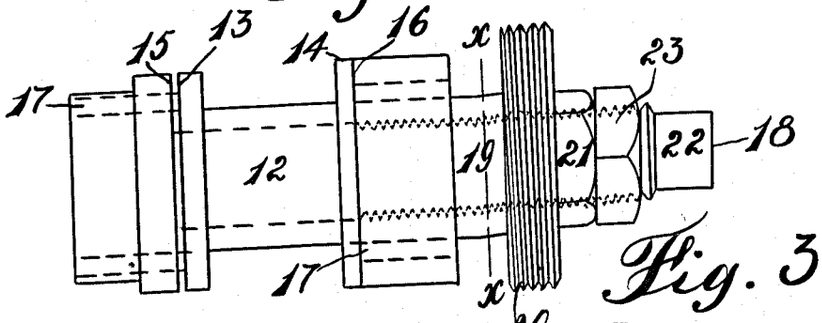

Fig. 3.

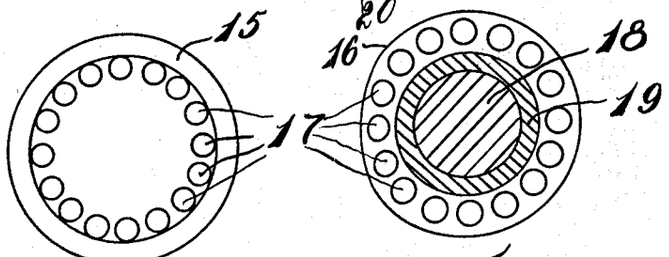

Fig. 4.

Fig. 5.

11/-

REMFRY & SON.

26777

Application fee and Stampin
Power re John Slorach.
See letter of date.

REMFRY & SON.

per WC

To Br V

111

26/7

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness the Maharaja of Mysore, Genl. and Rev. Dept.

To The officer in charge of State Hugus 2y Bangalore.

Dated

Despatched 5-8-09

Received

General No. G 616/gm 55 09 2

No.

Enclosure No. Rs 10/-

Has the honor to remit herewith Rs 10 (ten only) being the fee for the application of mr John Slorach of Cleveland, near Johannesburg for leave to file a specification of an invention for "improvements in valve devices for Rock-drills and similar reciprocating engines" and to request an acknowledgement

I have the honor to be

Sir

Your most obedient servant

[illegible]

Asst.

MGC FB—20,000—16-2-05

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness
the Maharaja of Mysore,
Genl. and Rev. Dept.

To The Superintendent of Stamps in Mysore.

Dated

Despatched 5-8-09

Received

General No. C 617/Gen 55-09-3
No. 10

Enclosure No. 1 with 251

Has the honour to forward for being stamped and returned a power of attorney executed by Mr John Sloraen of Cleveland near Johannesburg in favour of messrs Remfry and Son, solicitors and patent Agents of Calcutta for carrying on business in connection with an invention for "Improvements in valve devices for Rock-drills and similar reciprocating engines"

Nay x

G.T.O

MGCFB—20,000—16-2-05

2/ A sum of ~~Rs~~ rupee one is here with sent towards the stamp duty

G.R.S. 29A]

190 .

From

Secy. to the Govt. of His Highness
the Maharaja of Mysore,
Genl. and Rev. Dept.

To

The State Geologist

Dated 8-8-05 in Mysore

Despatched Cy 618/8 mi 55 09.4

Received

General No.

No.

Enclosure No. One

Has the honor to forward for report under section 6(2) of the Mysore Inventions and designs Regulation, a specification of an invention for "Improvements in valve devices for Rock-Drills and similar reciprocating engines" received from Mr John Storah of Cleveland near Johannesburg

By Order

8RX 2/8

MGCP—10,000—7-2-05.

MYSORE GOVERNMENT

No. 149 CJ 104 D 664 Rs. 10/-

Received From the Secretary to the Government of H.H. The Maharaja of Mysore, General and Revenue Department,

the sum of Rupees Ten only, being the application fee of Mr. John Slowrach of Cleveland for leave to file a Specification of an invention for improvements in valve devices for Rock-drills and credited this day. Vide, Secretary's No. G 616/Qu 55-09-2 dated 5th August 1909.

H. H. The Maharaja's State Huzur Treasury,
Bangalore, the 6th August 1909

By Order,

Exd.

Hd. Acctt. Bakshi Treasurer

Treasury Officer, State Huzur Treasury.

1909

From K Krishna Iyer Esqr
Superintendent of Stamps
in Cuspore
Bangalore

To The Secretary to the
Government of Cuspore
General and Revenue Depts
Bangalore

Dated 6th

Despatched 7 August/09

Received

General No. 34 D 618
No.

Enclosure ~~No.~~ One Stamped
Document

G. No. 55-09-10
S.C.G.

Sir,

I have the honor to
return herewith duly
Stamped the Power of attorney
received with your Docket
No G.617/G. No 55-09-3 Dated
5th August 09 and to
request the favor
of an acknowledgment.

I have the honor to be
Sir,
Your most obedient Servant

Superintendent of Stamps
in Cuspore

ASpr.

P O W E R A T T O R N E Y.

In the matter of the Inventions and Designs Regulation, 1894, of the Government of Mysore and in the matter of JOHN SLORACH, of The Geldenhuis Estate and Gold Mining Company, Limited, Cleveland, near Johannesburg, Transvaal, Engineer, an Inventor.

I, the abovenamed John Slorach, do hereby retain, constitute and appoint RUPERT REMFRY and HAMILTON GREEVES REMFRY, both of Hastings Street, Calcutta, British India, as my Agents and Attorneys to apply for and obtain from the Government of Mysore and keep in force an Exclusive Privilege or Letters Patent for Improvements in valve devices for rock-drills and similar reciprocating engines, and I authorise them to sign my name to such papers and writings and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

Dated this 16th day of June 1909.

Signed, Sealed and Delivered at Johannesburg, Transvaal, in the presence of:

John Slorach

Charles Ovendale
Patent Agent
Steytler's Buildings
Johannesburg,
Transvaal.

Frederick Arthur Ovendale,
Patent Agents' Assistant,
Steytler's Buildings,
Johannesburg, Transvaal.

SOLICITORS & PATENT AGENTS
REMFRY & CO.
CALCUTTA

MYSORE GOVERNMENT
AUG 1909
CENTRAL BRANCH

From

Secy. to the Govt. of His Highness the Maharaja of Mysore, Genl. and Rev. Dept.

To

The Supt of Stamps
in Mysore

Dated

Despatched 13 8-09

Received

General No. C 1909/8 M 55-09-7

No.

Enclosure No.

Has the honor to acknowledge the receipt of the Power of Attorney returned, duly stamped, with his letter No. 34 dated the 7th August 1909.

By order
Asst.
Secy

MGCPD—20,000—16-2-05.

MYSORE GEOLOGICAL DEPT.

190 0933

From

W. F. SMEETH Esq., M.A., A.R.S.M., &c.,
State Geologist in Mysore.

To

K[redacted]handrasekhara Iyer Esq.
Secretary to Government,
Judicial & Revenue Depts.

Dated

Despatched 30th August 190-

Received

General No. 650
No.

Enclosure No. one file.

His No. G. 618/G. M. 56-094
of 5th Aug. 1909.

Reports on the Specification of an invention for "Improvements in valve devices for rock drills & similar reciprocating engines" received with the above.

M. G. D. 13]

MYSORE GEOLOGICAL DEPARTMENT,

DATED BANGALORE, 30 August 190 9.

No. 650. me

From

DR. W. F. SMEETH, M.A., D.SC., A.R.S.M., etc.,
State Geologist in Mysore.

To

K.S. Chandrasekhara Iyer, Esquire, B.A.,B.L.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Gen & Rev.Depts.

SIR,

In reply to your docket No.G.618/G.M.55-09-4, dated 5th August 1909, forwarding for report, a specification of an invention for "Improvements in valve devices for rock drills and similar reciprocating engines", I have the honour to state that the device specified appears to me to be sound and likely to prove serviceable. So far as I know, it is novel and I am of opinion that the leave applied for may be granted.

2. The enclosures received with your docket under reply are herewith returned.

I have the honour to be,
Sir,
Your most obedient servant,

W. F. Smeeth

State Geologist in Mysore.

C.N.

jm

GPB—8-9-08—300

Dated 16.6.09 Received 26-7-09

A P P L I C A T I O N.

TO THE DEWAN OF MYSORE

The Application of JOHN ELORACH, of The Geldenhuis Estate and Gold Mining Company, Limited, Cleveland, near Johannesburg, Transvaal, Engineer, for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulation, 1894.

1. The Applicant has obtained a Patent in the United Kingdom No. 21011 of 1908, dated and sealed as of the 5th day of October 1908, and actually sealed on the 20th day of May 1909, for Improvements in valve devices for rock-drills and similar reciprocating engines.

2. To the best of the information and belief of the Applicant, the Invention is new within the meaning of Part I of the Inventions and Designs Act, 1888, and no circumstance exists which, if the Applicant is authorised to file a Specification and files it in accordance with that Part, will disentitle him to an Exclusive Privilege thereunder in respect of the Invention.

3. The following is a description of the Invention.

SOLICITORS & PATENT AGENTS REMFRY & SON CALCUTTA

S P E C I F I C A T I O N.

TO ALL WHOM IT MAY CONCERN.

Be it known that I, JOHN SLORACH, of the Geldenhuis Estate and Gold Mining Company, Limited, Cleveland, near Johannesburg, Transvaal, Engineer, am in possession of an Invention for Improvements in valve devices for rock-drills and similar reciprocating engines, and I, the said John Slorach, do hereby declare the nature of the said Invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement thereof, that is to say:-

Reciprocating engines for rock drilling and other purposes are known in which the piston, on approaching either end of its stroke, first closes an exhaust port in the cylinder wall and then compresses the remaining working fluid (hereinafter referred to as air) between itself and the cylinder cover. Such compressed air is forced up the induction port for the cylinder end in question, and forces a distributing valve from off the mouth of said port and causes it to close the mouth of the similar induction port provided for the other end of the cylinder, such last named end having already been

exhausted through a cylinder wall port. Live air thus passes through the open induction port and drives the piston on its return stroke; upon completion of which the distribution of air is reversed by a similar operation to that described.

It is the purpose of the present invention to provide, for an engine of the type specified, a novel form of valve device in which the valve is so constructed as to provide a large area available both for moving the valve and passing air to the cylinder, so that the travel of the valve may be very short, and the efficiency of the machine thereby increased ; in which the valve travel may be varied as may be necessary for the reasons hereafter stated; and by which the starting of the machine in any position is assured.

By way of example a rock drilling engine embodying the improved valve is shown in the accompanying drawings, in which

Fig. 1 is a longitudinal section of the engine,,

Fig. 2 a plan thereof,,

Fig. 3 is an enlarged elevation of the valve detached, and

Fig. 4 is a view of the left hand end thereof, and

Fig. 5 is a section on the plane x-x Fig. 3 looking towards the left.

1 represents the cylinder with the piston 2 working therein. 3 and 4 are the induction ports to the front and rear end respectively of the cylinder. 5,6 are exhaust ports leading from the cylinder bore directly to the atmosphere.

Positioned longitudinally upon the cylinder is the valve chest 7 which includes the chamber 8 to which live air is supplied through inlet 9, and the terminals of the induction ports 3 and 4 which are separated from chamber 8 by the walls 10 and 11. The induction port 3 from the front of the cylinder is carried to the rear of the valve chest, and the induction port 4 to the front thereof..

The valve 12 is of the sliding type, formed with flat or substantially flat end faces 13 and 14 co-operating with corresponding faces on the seats 15 and 16, so as to provide a large opening in proportion to the travel. Said seats are apertured for the passage of air through them; being in the example shown, perforated by annular series of holes 17.

In the present case the valve is bored axially and slides upon a spindle 18 projecting from the valve seat 15. The second seat 16 is formed with an extension piece 19 upon which is formed a collar 20 somewhat larger in diameter than the seat proper. Internally the seat is threaded to screw upon the spindle 18; and the collar 20 has cut upon it an external thread equal in pitch to the spindle thread. Beyond the collar the extension is shaped to form a grip 21 for a wrench, as is also the end 22 of the spindle 18. 23 is a lock nut working upon the spindle 18.

The valve having been placed upon the spindle 18 and the seat 16 screwed up thereon to the requisite distance, the lock nut 23 is screwed home, thus securing the two seats against relative movement. The structure is then inserted through a tapped hole in wall 24 of the valve chest, into which the collar 20 is engaged. Seat 15 is formed with a reduced end which when the seat is in position passes into a circular orifice in wall 11, whilst the shoulder formed by such reduced end abuts against said wall. Seat 16 enters and fills the orifice in wall 10.

In a modified construction the valve seat 16 may be made separate from the extension piece 19 and collar 20, and the spindle 18 be screwed into the valve seat 16 and not extend through said extension piece 19 and collar 20. In this case the end of the extension piece 19 abutting the seat 16 would be provided with a cylindrical recess to receive, if necessary, the end of the spindle, so as to admit of any desired adjustment of the seats 15,16 relative to each other.

If desired a hole, closed by means of a plug, may be provided in the valve chest 7 opposite the end of the valve seat 15 through which a tool may be passed to knock out the valve 12 and seats 15,16.

In operation, the parts being positioned as seen in Fig. 1, live air passes from chamber 8 to the back

of the cylinder and drives the piston forward. The air in front of the piston is at first exhausted through ports 5 and 6, but after the latter is covered, the remaining air is compressed, forced up port 3, and throws the valve over. Live air is thus admitted to the front of the piston and the air behind it having already been exhausted through port 5, the piston returns and by compressing the air in the rear of the cylinder, again reverses the valve.

The exhaust ports 5 and 6 are placed nearer to the front than the rear end of the cylinder, in order to afford a comparatively free working stroke and substantial cushioning upon the return stroke. By arranging the valve and induction ports in the manner described, the valve will always assume the correct position for starting the machine should the latter be inclined longitudinally for drilling up or down holes, lateral tilting of the machine having no effect.

A short and rapid stroke is essential to the fullest efficiency of an engine of the class in question. The throw over should in fact be as nearly as possible instantaneous, since so long as the valve is in motion both induction ports are taking air. With a comparatively slowly moving valve, such as the ball valve hitherto used in engines of this class, air continues to pass to an undue extent to the advancing side of the piston and is unable to escape before

closure of the exhaust port, so that the piston is choked. In fact an apparently slight reduction of the speed of the valve may cause the motion of the piston to degenerate into a mere oscillation over the exhaust ports.

The travel of the valve is therefore in practice reduced to the smallest limit consistent with the avoidence of substantial wire drawing of the air, and to obtain the best efficiency with any particular machine the valve travel should be adjusted in accordance with the pressure of the air. Thus upon the pressure of the motive fluid being substantially altered at any time, or the valve and seats having become worn, the distance between the seats would be adjusted accordingly, a less valve opening being required as the pressure is raised, and vice versa. Such adjustment may readily be made with the device described and shewn in the drawings, by slacking the lock nut 23, holding spindle 18 by means of a spanner applied to its polygonal end 22, screwing seat 16 in or out as the case may be by means of a second spanner applied to its polygonal part 21, and finally re-locking the parts by means of nut 23. Should the spindle 18 not extend through the valve chest, then the valve would have to be removed from the valve chest in order to adjust it.

The improved valve device described, when properly set, will enable very high piston speeds to be attained;

whilst of course the small momentum attained by the valve minimises wear. It may also be noted that the absence of a separate air supply for operating the valve permits a material economy of compressed air to be effected.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:-

1. In an engine of the class specified, in combination the cylinder 1, piston 2, induction ports 3 and 4 to the cylinder ends, the valve chest 7 comprising the central feed chamber 8 and the terminals of the induction ports, the valve 12 having flat end faces 13 and 14, and the detachable valve seating comprising the perforated seat 15 carrying a threaded spindle 18 upon which the valve is loosely mounted, and the seat 16, said valve seating being held in the walls of the valve chest by means of a threaded collar 20 upon the seating 16, substantially as described.

2. In an engine of the class specified, a longitudinally guided distributing valve having substantially flat end faces and corresponding apentured valve seats with which such valve faces make contact alternately.

3. In an engine of the class specified, a valve and valve seats, so constructed that the travel of the valve may be altered..

4. In an engine of the class specified and having a valve movable parallel with the piston, an induction port from the front of the cylinder leading to the rear of the valve, and an induction port from the rear of the cylinder leading to the front of the valve.

5. A valve device for an engine of the class specified constructed substantially as described and shown in the accompanying drawings.

4. The Applicant, therefore, applies for leave to file a Specification of the Invention pursuant to Part I of the Inventions and Designs Regulation, 1894.

John Clorach

I, the Applicant above named, do declare that the facts stated in this Application are true to my knowledge, except as to matters stated on information and belief and as to those matters I believe them to be true.

Dated this 16th day of June 1909.

John Clorach

No. 2845

MYSORE P. W. DEPARTMENT

CENTRAL OFFICE,

Bangalore, 21st March 1910.

From

M. Visvesvaraya, Esq., M.I.C.E.,

Chief Engineer of Mysore,

Bangalore.

To

C.S. Balasundaram Iyer, Esq., B.A.,

Officiating Secretary to the Government of

His Highness the Maharaja of Mysore,

General & Revenue Departments.

SIR,

I have the honor to acknowledge the receipt of a copy of the specification in respect of an invention for "Improvements in valve devices for rock-drilling and similar reciprocating engines" filed by Mr. John Slorach of the Geldenhuis Estate and Gold Mining Company Limited, Cleveland, near Johannesburg, received with your No. G. 4858/ G.M 55-09-15 of the 17th instant.

I have the honor to be,

sir,

Your most obedient servant,

For Deputy Chief Engineer,

Mysore P.W.Department.

GPB—2,000—24-9-07

5 3877
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MYSORE P. W. DEPARTMENT.

No. 2545

From

THE CHIEF ENGINEER OF MYSORE,

Bangalore.

Gen. S S 09-10
Sl 18.

To The Secretary to Govt.
Revl & Rev: Depts.

Dated Bangalore, 21st March 1910

Despatched 22

Enclosure *No.*

SUBJECT.

Acknowledging the receipt of a copy of the Specification in respect of an invention for "Improvements in valve devices for rock drilling &c"

No 9 1627/Gen 55-09-9

GOVERNMENT OF MYSORE

General Department.

Register No. 6 **of 190** 9-10.

Bangalore, the 13th Sept *190* 9

WHEREAS an application, dated the 16th June 1909 and received on the 26th June 1909, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by Mr John Slorach of the Geldenhuis Estate and Gold Mining Company Limited, Cleveland, near Johannesburg, Transvaal, Engineer (hereinafter referred to as "the applicant") for leave to file a specification of an invention for "Improvements in valve devices for rock drills and similar reciprocating engines"

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

For *Secretary to the Govt. of Mysore,*
Gen. and Rev. Depts.

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the fifth day of March 1910 ~~190~~.

For *Secretary to the Govt. of Mysore,*
Gen. and Rev. Depts.

(Section 8 of the Inventions and Designs Regulation, 1894.)

8. (1) If within six months from the date of an order under Section 6, Sub-Section (1), or within such further time, not exceeding three months, as the Government of Mysore, in its discretion, may, on cause shown to its satisfaction and on payment of the fee prescribed in that behalf in the fourth schedule, see fit to allow, the applicant causes a specification of his invention to be filed in manner by this Part required, and the fee prescribed in the fourth schedule in respect of the filing of the specification to be paid, the applicant shall, subject to the other provisions of this Part, be entitled to the exclusive privilege of making, selling and using the invention in the Territories of Mysore, and of authorizing others so to do, for a term of fourteen years from the date of the filing of the specification.

(2) But an exclusive privilege in respect of an invention of a new manufacture shall, notwithstanding anything in Sub-Section (1), cease, if the inventor fails to pay, within the time limited in that behalf by the fourth schedule, any fee prescribed in that schedule in respect of the continuance of the privilege.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, an inventor fails to pay any such fee within the time so limited, he may apply to the Government of Mysore for an enlargement of the time for making the payment.

(4) Thereupon the Government of Mysore may enlarge the time accordingly, on payment of the fee prescribed in that behalf in the fourth schedule, and subject to the following conditions, namely :—

(*a*) the time for making a payment shall not in any case be enlarged for more than three months ; and

(*b*) if any suit is instituted in respect of an infringement of the exclusive privilege committed after a failure to make a payment within the time limited for the making thereof and before the enlargement of that time, the Court disposing of the suit may, if it thinks fit, refuse to award or give any damages in respect of the infringement.

GPB—500—7-4-09.

M. G. D. [13]

MYSORE GEOLOGICAL DEPARTMENT,

DATED BANGALORE, 15 March 190 .

No. 1938

From

DR. W. F. SMEETH, M.A., D.SC., A.R.S.M., &c.,
State Geologist in Mysore.

To

C.S. Balasundaram Iyer, Esquire, B.A.,
Offg. Secretary to the Government of His Highness the Maharaja of Mysore, Gen.Rev.Dept.

SIR,

I have the honour to acknowledge the receipt of a copy of the specification in respect of an invention for "Improvements in valve devices for rock-drilling and similar reciprocating engines", forwarded for record with your No.G.4858-60/G.M.55-09-15, dated 17th March 1910.

I have the honour to be,

Sir,

Your most obedient servant,

for State Geologist in Mysore.

C.M.

GPB—300—10-10-06

E.w 55-09-10
8 C 17

No 378   L 3835 Rs 30/-

Received From Messrs Rempfry & Son on behalf of John Sloach of the G F & Gold Mining Company, Limited, through the officiating Secretary to the Government of HH the Maharaja of Mysore, G & Rev Department, the sum of Rupees Thirty only, being the fee in respect of "Improvements in valve devices for Rock-Drills and similar reciprocating Engines" & credited this day. Vide, Secretary's no G 1685 dated 17 March 1910.
Epw 55-09-11

H. H. The Maharaja's State Huzur Treasury,
Bangalore the 19 March 1910

By Order,

Exd.
Hd. Acctt.

~~Bakshi~~ Treasurer

Treasury Officer, State Huzur Treasury.

Cleveland, Ohio —

Johannesburg, Transvaal,

the favor of

and to request an

acknowledgment

By order

For Mg Secy

V.S.

Typed by
B Lakshmanan
No. 3. 10.

From

Secy. to the Govt. of His Highness the Maharaja of Mysore, Genl. and Rev. Dept.

To 1) The State Geologist
2) The Chief Engineer
3) The Supdt, Govt Museum

Dated

Despatched 17. 3. 10

Received

General No. G. 4858-60

G. M. No. 55-9-15

ENCLOSURE No. one (1) each.

---

has the honor to forward for record in his office, a copy of the specification in respect of an invention for "Improvements in valve devices for rock-drilling and similar reciprocating Engines" filed by Mr John Sloracch of the Geldenhuis Estate and Gold mining Company Ltd,

"Improvement" in valve devices for Rock-drills and Similar reciprocating Engines" and to request the favor of an acknowledgement

By order

DBR

For DBR Lee

VS

Typed by
BKahlenberg
14-3-10

G.R.S. 29A]

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From

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To

The Officer in charge
of State Papers

Dated

Despatched 17-8-10.

Received

General No. G. 4857

~~G. M. No. 55-09-14~~

ENCLOSURE NO. Rs 30

Has the honor to forward
herewith Rs 30 (thirty only)
being the fee paid by Messrs
Rempfer and Son on behalf
of Mr. John Storach of the
Geldenhuis Estate and
Gold mining Company Ltd.
Cleveland, near Johannesburg,
Transvaal, for filing
the Specification in
respect of an invention for

No. Q. 4856 Exc. 2,
Q. M. 55-09-13.

MYSORE GOVT. GEN. & REV. SECRETARIAT,
Dated Bangalore, 17. 3. 1910.

From

The Secretary to the Government of H. H. the Maharaja of Mysore,
General and Revenue Departments.

To

Messrs Remfry and Son
Solicitors and patent Agents
Calcutta

Gentlemen
~~Sir,~~

With reference to your letter dated the 1st march 10 I am directed to forward copy of a Notification No. Q. 4855/Q. M. 55-09-12 dated 17. 3. 10. issued by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.)

The order granting permission to file specification is herewith returned, with the certificate at foot, duly filled in and signed. for Communication to two parties Concerned

I have the honor to be,
Sir,
Your most obedient servant,

For Secretary.

Typed by
B. Lakshmanachar
Re. 3-co.

MYSORE GOVT. GEN. & REV. SECRETARIAT,

No. C. 4855 — Dated Bangalore, 12-3-1912 190

C.R.55-9-12

NOTIFICATION.

(PATENT.)

The following specification of an invention has been filed in accordance with Sections 8, 9, 10 and 11 of Regulation XI of 1894 (The Inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the Secretary to the Government of His Highness the Maharaja of Mysore, General and Revenue Departments, and on payment of a fee of one Rupee.

By Mr John Slorach of the Geldenhuis Estate and Gold mining Company, Limited, Cleveland, near Johannesburg, Transvaal Engineer.

"Improvements in valve devices for rock-drills and similar reciprocating Engines".

By Order,

K. Rama Rao

for Secretary.

To

The Compiler, *Mysore Gazette*, for publication

VS

Typed by
B. Lakshmanan
14.3.12

Cy

Ap 1910

Gen. 5704-10

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To

MYSORE.

THE SECRETARY TO THE GOVERNMENT OF ~~INDIA,~~

Genl. & Rev. Departments.

~~DEPARTMENT OF REVENUE AND AGRICULTURE (PATENTS).~~

Bangalore, Mysore.

From

REMFRY & SON,

Solicitors and Patent Agents,

CALCUTTA.

Dated Calcutta, 1st March 10.

Sir,

Pursuant to the leave dated the 13th September 1909, (Register No. 6 of 1909-10) we have the honour to forward herewith 4 copies of the Specification of JOHN SLORACH of the Geldenhuis Estate and Gold Mining Company, Limited, Cleveland, near Johannesburg, Transvaal, Engineer, in respect of an Invention for "IMPROVEMENTS IN VALVE DEVICES FOR ROCK-DRILLS AND SIMILAR RECIPROCATING ENGINES".

The prescribed fee of Rs30/- is sent by P.O.O. today.

The above mentioned Order is enclosed herewith and we solicit the favour of your filling in the date of filing Specifications as 5th March 1910 and of your signing the Certificate at foot thereof, returning such Order to us, and entering our Office in Calcutta as the Address for Service under the Act.

We have the honour to be,

Sir,

Your very obedient servants,

REMFRY & SON.

per

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Gen 55/09-10

G.R.S. 26].

File No.

Serial No. 10

*Diary No. of letter replied to*_____

No G 1628
13.9.09

General and Revenue Secretariat
( )
, *the* 190

To

messrs Remfry and Son
Solicitors and Patent Agents
Calcutta

Date of issue 13.9.09

Signed by [illegible]
for

Gentlemen,

With reference to your letter dated the 23rd July 09 forwarding an application of Mr. John Storrach of the Geldenhuis Estate and Gold Mining Company Limited, Cleveland near Johannesburg, Transvaal, Engineer, for leave to file a specification in respect of an invention for a Improvement in valve devices for rock drills and

over.

SUBJECT.

Similar reciprocating
Empires" I am directed
to forward herewith
Govt order No 6/1627/8711 55-09-9
dated 13-9-09 * bearing the Invention
issued in the name of No 6 of 1909-10
the Applicant and to
request that the same
may be communicated
to the Party concerned
and acknowledgment
sent to this Office

I have &c

for Secy

List of enclosures

Copied by

Examined by

GPB—10,000—20-4-05.